

# **Historic, Archive Document**

Do not assume content reflects current  
scientific knowledge, policies, or practices.



Ag 84 Gro # 317

#317

# REDUCING LIVESTOCK LOSSES

from

*Chokecherry*  
**POISONING**

in the  
**Western States**



PA-317

UNITED STATES DEPARTMENT OF AGRICULTURE

# REDUCING LIVESTOCK LOSSES

from

## Chokecherry POISONING

### in the Western States

When drought and overgrazing strip the pastures and ranges of grass and other forage, livestock are forced to eat chokecherry. They may become poisoned if they eat considerable quantities of the leaves in a short period.

Sheep are often affected by chokecherry poisoning; occasionally cattle may be affected. Although most losses occur when feed is scarce, some animals may occasionally prefer these plants to other forage. Sheep that have had water are usually hungry and are attracted to chokecherry. Cattle

sometimes are poisoned by eating leaves on branches that are trimmed from cultivated cherry trees.

The toxic substance in chokecherry is prussic, or hydrocyanic, acid, which is contained principally in the leaves. The leaves become less toxic as the growing season advances.

Several kinds of chokecherry occur in the United States. Western chokecherry<sup>1</sup> and black chokecherry<sup>2</sup> are plants of the western range States and cause most livestock poisoning. Eastern chokecherry<sup>3</sup> grows as far west as Iowa.

### Where and When It Grows

Chokecherry grows where moisture is plentiful. The plants are

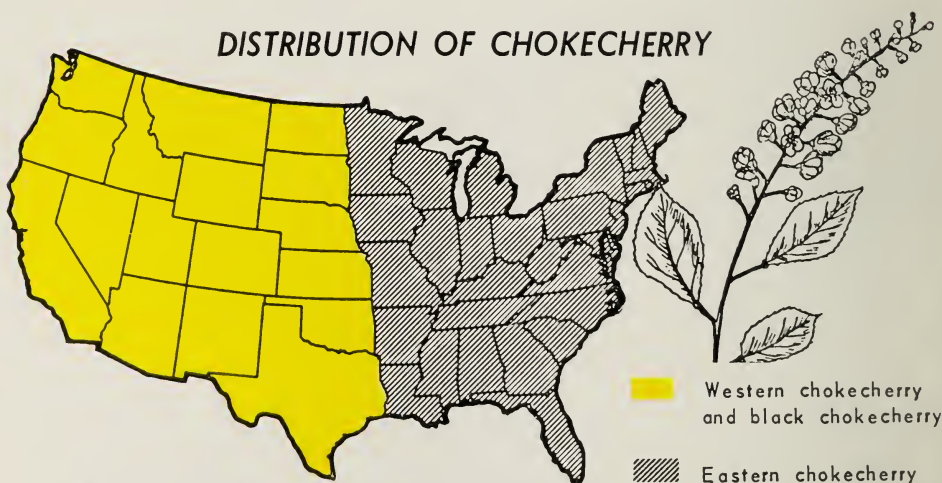
found in thickets along hillsides and on canyon slopes. They appear

<sup>1</sup> *Prunus virginiana* var. *demissa*.

<sup>2</sup> *P. virginiana* var. *melanocarpa*.

<sup>3</sup> *P. virginiana*.

### DISTRIBUTION OF CHOKECHERRY



Plant sketch from W. C. Muenscher, *Poisonous Plants of the United States*, The MacMillan Company, 1951



TN-3

**Chokecherry** is a shrub or small tree that has dark-green, glossy leaves. It bears masses of white flowers in long clusters in the spring, and many small purple to black cherries in the fall. The plant belongs to the rose family.

as shrubs or small trees among willows, poplars, and alders that grow along mountain streams.

Chokecherry starts growth early


in the spring. New foliage appears at about the time early spring plants, such as buttercups, begin to flower.

## How It Affects Livestock

Two to 4 ounces of green leaves may contain enough prussic acid to kill a 100-pound sheep. For choke-

cherry to be fatal, an animal must eat a toxic dose in a relatively short period—30 minutes to an hour.

**The following are symptoms of chokecherry poisoning:**

- 
1. Nervousness
  2. Abnormal breathing, either very rapid or slow and deep
  3. Trembling or jerking movement of the muscles
  4. Blue discoloration of the membranes of the mouth
  5. Spasms or convulsions may develop and continue at short intervals until death results from respiratory failure

## How To Reduce Livestock Losses

Livestock owners should avoid grazing hungry or thirsty animals where chokecherry is abundant.

The action of prussic acid is so rapid that it is usually too late to treat an affected animal after the symptoms are recognized. Some sheep may be saved by having ready and injecting intraperitoneally 20-percent solutions of sodium nitrite and sodium thiosulfate. Sufficient quantities of each solution should be injected to give an animal 1 gram of sodium nitrite (about 5 cc.) and 2

grams of sodium thiosulfate (about 10 cc.). Twice this amount should be given to cattle; it should be administered intravenously. *Note:* This treatment should be made under the direction of your local veterinarian.

Eradication of chokecherry is not practicable on a large scale. In small areas, especially around watering places, these plants may be killed by 2 or more annual treatments with 2,4,5-T applied during the flowering stage.

## Where To Obtain More Information

You can obtain more information on chokecherry poisoning by getting in touch with your county agricultural agent or by writing to your State agricultural experiment sta-

tion or to the U. S. Department of Agriculture. Consult your local veterinarian if you have any questions regarding animals with chokecherry poisoning.

## *Know Poisonous Plants • Reduce Livestock Losses*

*Prepared by the Animal Disease and Parasite Research Division, Agricultural Research Service. Acknowledgment is made to the staff of the Utah Agricultural Experiment Station.*

Washington, D. C.

☆ 421072 U. S. GOVERNMENT PRINTING OFFICE : 1958

Issued April 1958